

INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/FR2004/050010

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N30/72 H01J49/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 817 347 A (COMMISSARIAT ENERGIE ATOMIQUE) 31 May 2002 (2002-05-31) cited in the application abstract	1-3
A	HAIL M E ET AL: "THEORETICAL AND PRACTICAL ASPECTS OF SHORT OPEN TUBULAR COLUMNS AT SUBAMBIENT PRESSURES IN GAS CHROMATOGRAPHY/MASS SPECTROMETRY" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, COLUMBUS, US, VOL. 61, no. 21, 1 November 1989 (1989-11-01), pages 2402-2410, XP000134377. ISSN: 0003-2700 abstract	1-3

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

28 June 2004

Date of mailing of the international search report

09/07/2004

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hodson, M

INTERNATIONAL SEARCH REPORT

Int'l Application No.
PCT/FR 04/050010

C.(Continuation) DOCUMENTS CONSIDERED RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 970 905 A (MCCLENNEN WILLIAM H ET AL) 20 November 1990 (1990-11-20) abstract -----	1-3
A	US 4 988 870 A (DIEHL JOHN W) 29 January 1991 (1991-01-29) abstract -----	1-3
A	US 4 501 817 A (NG KWOKEI J ET AL) 26 February 1985 (1985-02-26) abstract -----	1-3
A	US 4 662 914 A (HANSEN STUART C ET AL) 5 May 1987 (1987-05-05) abstract -----	1-3
A	US 5 424 539 A (HABFAST KARLEUGEN ET AL) 13 June 1995 (1995-06-13) abstract -----	1-3
A	US 5 281 397 A (GRADE HANS ET AL) 25 January 1994 (1994-01-25) abstract -----	1-3

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int'l	Application No
	PCT/FR2004/050010

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
FR 2817347	A 31-05-2002	FR 2817347 A1			31-05-2002
		AU 2207002 A			11-06-2002
		CA 2397898 A1			06-06-2002
		EP 1337843 A2			27-08-2003
		WO 0244710 A2			06-06-2002
		JP 2004514905 T			20-05-2004
		US 2004025566 A1			12-02-2004
US 4970905	A 20-11-1990	AT 146878 T			15-01-1997
		AU 5813290 A			18-12-1990
		CA 2057888 A1			26-11-1990
		DE 69029517 D1			06-02-1997
		DE 69029517 T2			17-07-1997
		EP 0474741 A1			18-03-1992
		JP 4506115 T			22-10-1992
		WO 9014587 A1			29-11-1990
US 4988870	A 29-01-1991	NONE			
US 4501817	A 26-02-1985	US 4391778 A			05-07-1983
US 4662914	A 05-05-1987	NONE			
US 5424539	A 13-06-1995	DE 4333208 A1			30-06-1994
		GB 2273561 A , B			22-06-1994
US 5281397	A 25-01-1994	NONE			